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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2002953020 for a patent by RICHARD ALAN WALKER as filed on 02 December 2002.



WITNESS my hand this
Twenty-second day of October 2003

J. Billingsley

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RICHARD ALAN WALKER

FORM 9

COMMONWEALTH OF AUSTRALIA

Patents Act 1990

PROVISIONAL SPECIFICATION FOR THE INVENTION ENTITLED:

"CONSTRUCTION METHODS AND SYSTEMS"

This invention is described in the following statement:

CONSTRUCTION METHODS AND SYSTEMS

TECHNICAL FIELD OF THE INVENTION

THIS INVENTION relates to construction methods and systems and in particular but not limited to construction techniques and methods concerning exterior modular building materials, typically windows.

BACKGROUND TO THE INVENTION

Applicant has devised a number of inventions which may be employed generally to building and construction of a wide range of articles. Each of the inventions is described below independently and in combination applicant reserving his right to divide the present application or claim the invention in combination subject to the outcome of a PCT Article 15/5 International Type Search should the applicant exercise that option.

OUTLINE OF THE INVENTION

In one invention there is provided a connector system for connecting two slotted members together, the connector system comprising an elongate connector member and a connector member expander, the connector member being adapted to retentively engage the slots in the slotted members upon application of the expander to the connector member.

In another invention there is provided an improved window frame assembly having a sash, a sill and a seal disposed between the sash and sill, the seal having a section adjacent a lower edge of the window assembly, the sill and sash having complimentary lower marginal sections outboard of said seal and extending along at least the lower edge of the window assembly, the lower marginal sections

defining there between an inclined water flow passage means, the water flow passage means being downwardly inclined from a position adjacent said seal to the edge of the window assembly.

5 In another invention there is provided in combination a modular window system comprising window modules and a window module connector system, each window module having slotted outer frame members, the connector system comprising an elongate connector member and a connector member expander, the connector member being adapted to retentively engage the slots in the slotted members upon application of the expander to the connector member.

10 Preferably, the connector member is generally I-shaped in profile having a central web connecting opposed pairs of outwardly projecting arms, at least one set of arms receiving the expander in a slot so that upon axial movement of the expander, the arms are biased inwardly to retentively engage the slots in the slotted members.

15 BRIEF DESCRIPTION OF THE DRAWINGS

In order that the present inventions may be more readily understood and be put into practical effect reference will now be made to the accompanying drawings which illustrate preferred embodiments as applied to a modular window system and wherein:

20 Figure 1 is a schematic drawing illustrating a connector system as applied to modular windows;

Figure 2 and Figure 3 are drawings of part sections through lower marginal section of typical window assemblies;

Figure 4 is a schematic drawing illustrating the arrangement of modules typical in the applicants modular window system; and

Figures 5 and 6 illustrate a further embodiment of the invention.

METHOD OF PERFORMANCE

5 Referring to the drawings and initially to Figure 1 there is illustrated a modular window system employing window modules 10 and 11 which may be connected together to form a modular assembly 12. Each module has spaced dovetail slots 13 and 14 which are positioned in confronting location as shown in the inset and the modules are retained together by connectors 15 engaged in the
10 slots. A typical connector is illustrated in exploded form at 15 in Figure 1.

The connector 15 comprises a plastics connector member 16, an expander rod 17 and a threaded expander rod displacer 18. The connector member 16 has spaced dovetail style sections 19 on one side and a full length dovetail style 20 on the other side. The connector member is designed to slide in the confronting slots
15 13 and 14 with the wasted sections 21 of the expander 17 located inside each of the sections 19. Once in position the rod 18 is used to axially displace the expander 17 to force the enlarged sections 22 of the expander 17 into the sections 19. This has the effect of not only engaging the slot but at the same time of biasing the modules together.

20 It will be appreciated that the connector parts may be of any shape and configuration that is able to achieve that mechanically equivalent function described.

Figure 2 and 3 illustrate two different modules being a lower section of a double hung window at 24 and typical awning and casement window section at 25. Common to these is the sloping section 26 of the sill 27 outboard of a seal 28. In each case a sash 29 is complimentary with the sill 27.

5 Figure 4 illustrates typical modules and modular assemblies that may be made using the teachings of the present invention.

Figures 5 and 6 illustrate a further embodiment adapted to a different shaped slotted profile, the connector member 30 in this case is I-shaped and operates with an expander as described. The slotted members that are connected together have
10 confronting T-shaped slots corresponding to half the profile of the connector member. Figure 6 illustrates the way arms 31 and 32 are biased inwardly (in phantom) under the influence of the expander.

Whilst the above has been given by way of illustrative example many variations and modifications will be apparent to those skilled in the art without
15 departing from the broad ambit and scope of the invention as herein set forth.

DATED this 2nd day of December, 2002.

RICHARD ALAN WALKER
By his Patent Attorneys
INTELLPRO

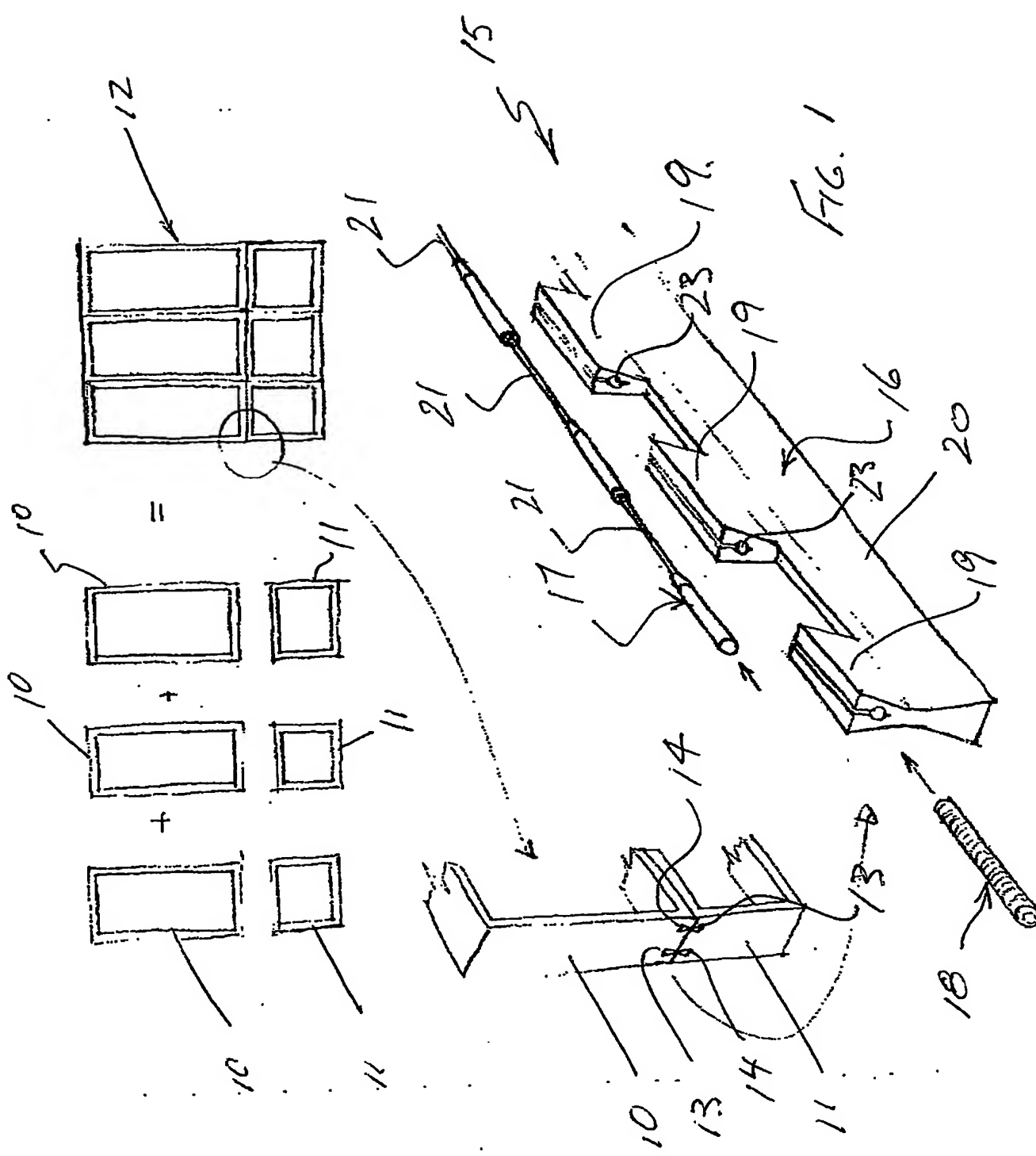


FIG. 1

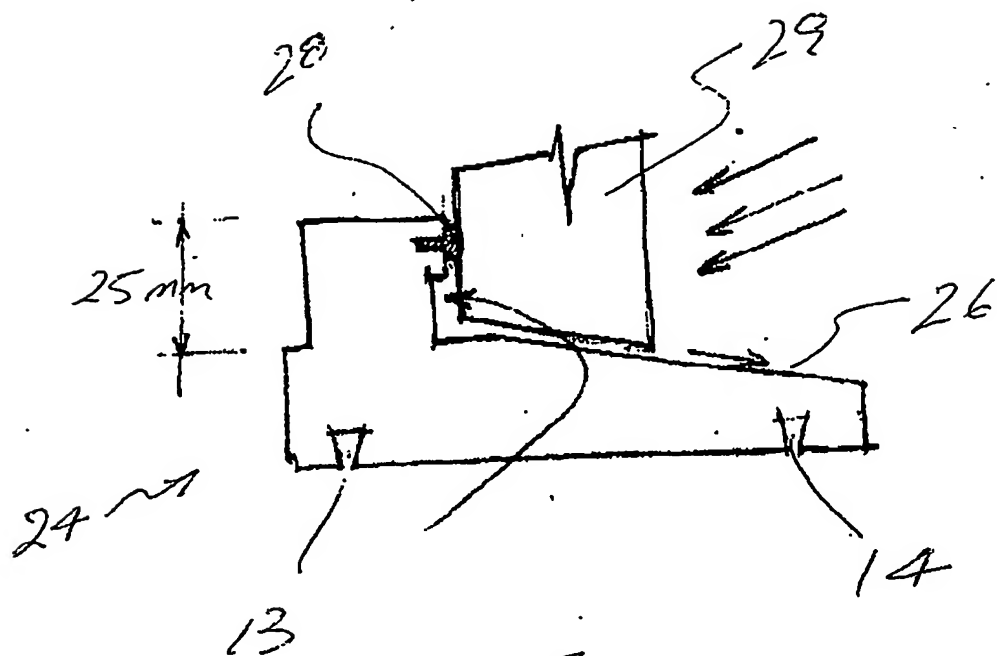


FIG 2

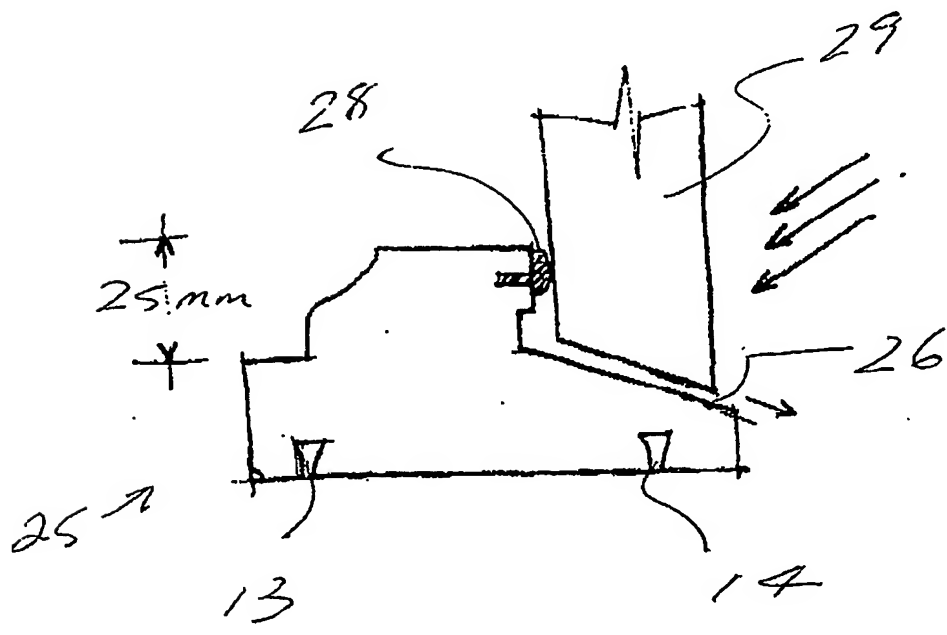


FIG 3

STANDARD MODULES

HORIZONTAL COMBINATIONS

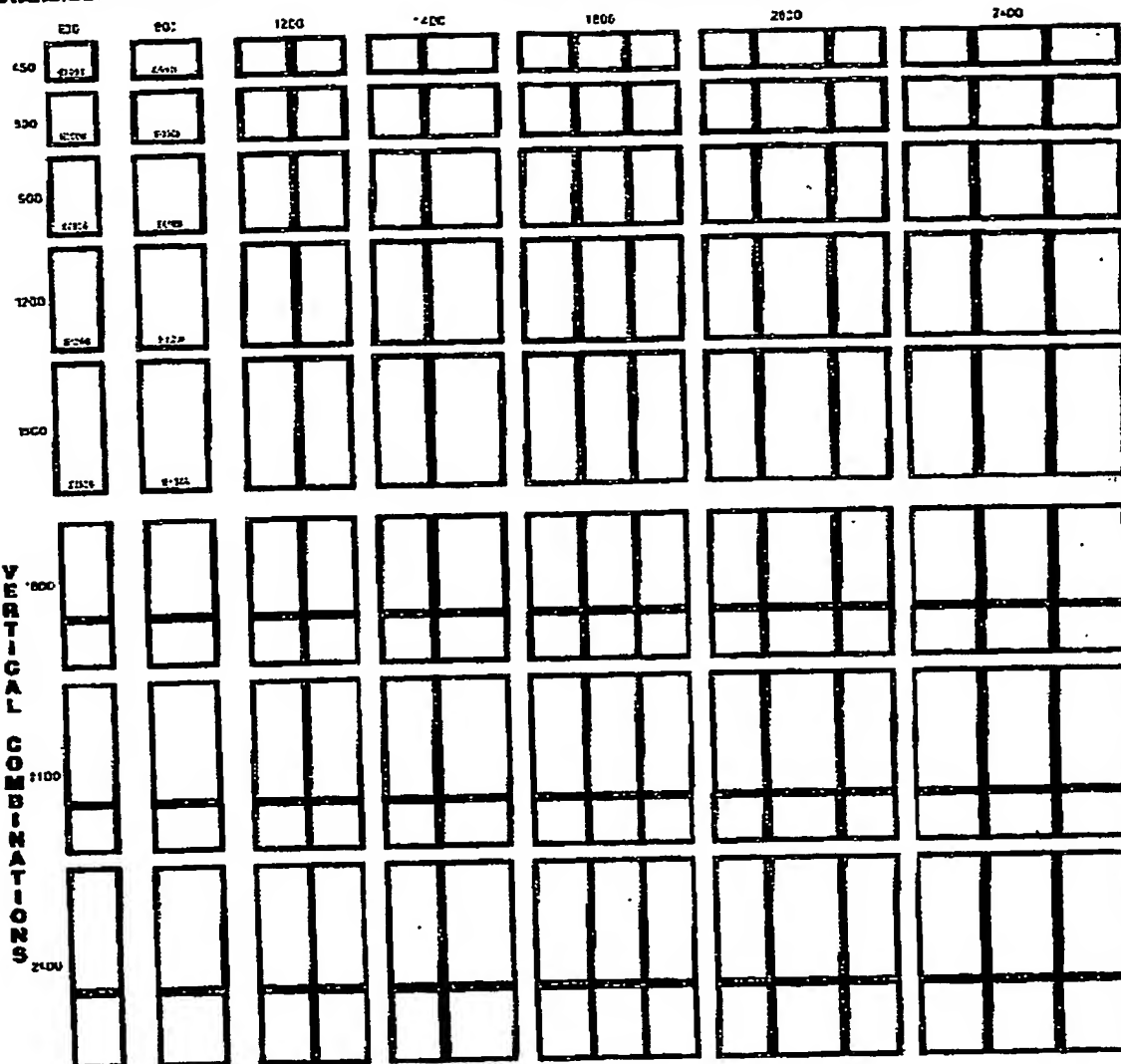


FIG. 4

